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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,246	01/21/2004	Kia Silverbrook	MPA10US	1590
24011	7590	12/01/2005	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, NSW 2041 AUSTRALIA			MARTIN, LAURA E	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/760,246

Applicant(s)

SILVERBROOK ET AL.

Examiner

Laura E. Martin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/3/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3-7 of copending Application No. 10760246. The applications are claiming common subject matter as follows:

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US 10/760246	US 10/760233
<p>CL 1</p> <p>A printhead assembly, comprising: at least two printhead modules, each comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface of print media, and a support member supporting the at least two printhead integrated circuits; and a casing in which the at least two printhead modules are arranged so as to be removably mounted in linearly aligned relationship, wherein the support member has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits, and each printhead module has end portions which permit interconnection of the linearly aligned printhead modules and provide for fluid connection of the channels of the support members thereof</p>	<p>CL 1/4</p> <p>A printhead assembly, comprising: at least two printhead modules each comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface of print media, and a support member supporting and carrying the printing fluid for the at least two printhead integrated circuits; and a casing in which the at least two printhead modules are arranged so as to be removably mounted in linearly aligned relationship, wherein the assembly has an aggregate length and a number of printhead integrated circuits predetermined to provide for selected pagewidth printing.</p> <p>A printhead assembly according to claim 3, wherein each printhead module of the at least two printhead modules has end portions which permit interconnection of the linearly aligned printhead modules and provide for fluid connection of the channels thereof.</p>
<p>CL 2</p> <p>A printhead assembly wherein the end portions of each of the printhead modules comprise complementary female and male end portions.</p>	<p>CL 5</p> <p>A printhead assembly wherein the end portions of each of the printhead modules comprise complementary female and male end portions.</p>
<p>CL 3</p> <p>A printhead assembly wherein a sealing adhesive is provided at the interface of the interconnected printhead modules.</p>	<p>CL 6</p> <p>A printhead assembly further comprising a sealing adhesive provided at the interface of the interconnected printhead modules.</p>
<p>CL 4</p> <p>A printhead assembly wherein the sealing adhesive is an epoxy.</p>	<p>CL 7</p> <p>A printhead assembly wherein the sealing adhesive is an epoxy.</p>
<p>CL 5</p> <p>A printhead assembly wherein: the at least two printhead modules are each formed as a unitary arrangement of the at least two printhead integrated circuits, the support member, at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member, and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits; and each of the support members has a plurality of apertures extending from the at least one channel through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members.</p>	<p>CL 3/4</p> <p>A printhead assembly wherein: the at least two printhead modules are each formed as a unitary arrangement of the at least two printhead integrated circuits, the support member, at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member, and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits; and the support member has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members.</p>

Although the conflicting claims are not identical, they are not patentably distinct from each other because one having ordinary skill in the art at the time of the invention would have recognized that the "aggregate length" occurs in any "linearly aligned relationship".

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverbrook et al. (US 6439908).

As per claim 1, Silverbrook et al. teaches a printhead assembly (10) comprising: at least two printhead modules (12), each comprising at least two printhead integrated circuits (18), each of which has nozzles (42) formed therein for delivering printing fluid onto the surface of print media, and a support member (28) supporting the at least two printhead integrated circuits; and a casing (14) in which the at least two printhead modules are arranged so as to be removably mounted in linearly aligned relationship,

wherein the support member has at least one longitudinally extending channel (72) for carrying the printing fluid for the printhead integrated circuits (C4, L41-44), and each printhead module has end portions (16) which permit interconnection of the linearly aligned printhead modules and provide for connection of the channels of the support members thereof (figure 2).

As per claim 2, Silverbrook et al. teaches a printhead assembly wherein the end portions of each of the printhead modules comprise complementary female (38) and male (42) end portions.

As per claim 3, Silverbrook et al. teaches a printhead assembly wherein a sealing adhesive is provided at the interface of the interconnected printhead modules (84).

As per claim 5, Silverbrook et al. teaches a printhead assembly wherein the at least two printhead modules (12) are each formed as a unitary arrangement of the at least two printhead integrated circuits (18), the support member (28), at least one fluid distribution member (30) mounting the at least two printhead integrated circuits to the support member, and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits (C3, L59-61), and each of the support members has a plurality of apertures extending from the at least one channel through a wall of the support member arranged so as to direct the printing fluid (72) from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (C4, L41-44).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. (US 6439908) in view of Lu et al. (US 2003/0007042).

Silverbrook et al. teaches a printhead assembly with a sealing adhesive, however, it does not teach the sealing adhesive being epoxy.

Lu et al. teaches a sealing adhesive being epoxy (P2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Silverbrook et al. with that of Lu et al. in order to create a more durably printhead.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David M. Gray can be reached on (571) 272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'David Gray', with a large, stylized loop at the end.

David Gray
Primary Examiner

Laura E. Martin